

Title (en)  
CARBON BLACK SAMPLING FOR PARTICLE SURFACE AREA MEASUREMENT USING LASER-INDUCED INCANDESCENCE AND REACTOR PROCESS CONTROL BASED THEREON

Title (de)  
PROBENNAHME VON RUSS ZUR MESSUNG DER TEILCHENOBERFLÄCHE MITTELS LASERINDUZIRTER WEISSGLUT UND DARAUF BASIERENDE KONTROLLE EINES REAKTORVERFAHRENS

Title (fr)  
ECHANTILLONAGE DE NOIRS DE CARBONE POUR LA MESURE D'UNE SURFACE PARTICULAIRE AU MOYEN D'UNE INCANDESCENCE INDUITE PAR LASER ET COMMANDE ASSOCIEE D'UN PROCESSUS A REACTEUR

Publication  
**EP 1525455 A1 20050427 (EN)**

Application  
**EP 03765743 A 20030718**

Priority  
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Abstract (en)  
[origin: WO2004010123A1] Method for in-situ sampling and measuring particulate (e.g., carbon black) fineness in a process stream, such as in a carbon black reactor, comprising (a) sampling particles in-situ from a process stream, (b) adjusting the sample to conditions suitable for 1,11, (c) measuring the fineness using LII, and (d) correlating the LII fineness measurement with actual particle fineness. Method for in-situ sampling a particle-containing stream and measuring particle fineness using laserinduced incandescence (LII) comprising (a) sampling particles in-situ, (b) adjusting the sample to conditions suitable for LII, (c) measuring the adjusted sample using LII, and (d) correlating the LII measurements with actual particle fineness. Also included is a method of sampling and controlling a process based on the real-time, on-line, in-situ methods for sampling and measuring particles. Sampling can comprise drawing a sidestream from a source of the particles. Adjusting the sample to conditions suitable for LII can comprise diluting the sample or bringing the temperature of the sample to ambient conditions. Correlating may comprise using a correlation function determined by comparing LII measurements and laboratory fineness measurements for particle samples drawn at the same time.

IPC 1-7  
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IPC 8 full level  
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